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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,237	07/31/2003	Nandakumar Vaidyanathan	PTK-226	2540

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EXAMINER

NGUYEN, JOHN QUOC

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3 and 4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Said subject matter is in amended claims 3, 4, 18, 20, and 21.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For clarity and/or definiteness, it appears

All claims should be revised carefully to correct all other deficiencies similar to the ones noted above.

Claims 1-5, 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mucke et al (US-5629487) in view of Park et al (US-5089741).

Mucke et al discloses a plurality of sensors/sensor assemblies (each comprising elements 1 and 3) positioned substantially flush with the circumferential surface of cylinder 4 for measuring the force applied by the web 8. Since element 3 is integral with the sensor 1 and moves integrally with the sensor 1, it is deemed to be part of the sensor assembly or "sensor", each sensor assembly/sensor comprising elements 1 and 3. The alternative use of a force-sensitive resistor or load cell as the sensor in Mucke et al in lieu of the piezo-electric type of sensor would have been obvious consideration to a person having ordinary skill in the art since such sensors are old and well known in the sensor art, as previously noted. Sheet based sensors are known and available commercially as admitted by applicant (see original specification page 8, last paragraph, and page 9, first paragraph). Park et al is cited to show that sheet based piezoelectric sensors are old and well known. Therefore, It would have been obvious to a person having ordinary skill in the art to alternatively provide the sensors of Mucke et al with sheet based sensors which are old and well known as evidenced by Park et al to take advantage of their technical properties (including reduced thickness) and commercial availability.

Claims 1-10, 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mucke et al (US-5629487) in view of Lee (US-5553801) and Park et al (US-5089741) or Lee in view of Mucke et al. and Park et al.

Mucke et al discloses a plurality of sensors 1 within the circumferential surface of cylinder 4 for measuring the force applied by the web 8. The measurements are then

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used to control an operation of the apparatus. Lee discloses another similar apparatus with a sensor 20 on a cylinder 30 to measure the force applied by the web. An inherent actuation device/controller controls and adjusts the rotation of the cylinder. The measurements are then used as input to a servo controller to control a tensioning device (tension pole) or reel drive clutch of the running mechanism. Sheet based sensors are known and available commercially as admitted by applicant (see original specification page 8, last paragraph, and page 9, first paragraph). Park et al has been advanced above. The alternative use of a force-sensitive resistor or load cell as the sensor in lieu of the piezo-electric type of sensor would have been obvious consideration to a person having ordinary skill in the art since such sensors are old and well known in the sensor art, as previously noted. Therefore, It would have been obvious to a person having ordinary skill in the art to alternatively provide the sensors of Mucke et al or Lee with sheet based sensors which are old and well known as evidenced by Park et al to take advantage of their technical properties (including reduced thickness) and commercial availability. It would have been obvious to a person having ordinary skill in the art to provide the apparatus of Mucke et al with means to adjust the force applied by the web (control tension) as taught by Lee for the same purposes as Lee. Alternatively, it would have been obvious to a person having ordinary skill in the art to provide the apparatus of Lee with a roller and plurality of sensors as taught by Mucke et al to obtain a more accurate measurement of force across the web width. That the set value comprises a range would have been an obvious matter of design choice to a person having ordinary skill in the art based on

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factors such as preference and design/operational criteria. To adjust the rotation of one of the supply or uptake spool to adjust tension/force (such as braking the supply spool to increase tension) is old and well known in the art and Official notice is hereby taken of such; therefore, to adjust spool rotation to adjust tension would have been obvious to a person having ordinary skill in the art.

Claims 6-10, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis (US-6325322) in view of Mucke et al (US-5629487), Lee (US-5553801), and Park et al (US-5089741).

Lewis discloses a tension control system in a cylinder having a cavity that accommodates the supply and take-up spools, Fig. 4, as well as prior art system in which the cylinder accommodates the supply and take-up spools in separate cavities, Fig. 3. An inherent actuation device/controller controls and adjusts the rotation of the cylinder. Mucke et al, Lee, and Park et al have been advanced above and the applicable portions of that rejection is incorporated by reference. It would have been obvious to a person having ordinary skill in the art to provide the apparatus of Lewis with sensors as taught by Mucke et al to more accurately measure the tension in the web and with means to adjust the force applied by the web (control tension) as taught by Lee. The alternative use of a force-sensitive resistor or load cell as the sensor in lieu of the piezo-electric type of sensor would have been obvious consideration to a person having ordinary skill in the art since such sensors are old and well known in the sensor art, as previously noted.

Claims 11-15 and 25-27 are allowed.

Applicant's arguments filed 12/23/05 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the material at the surface of the cylinder is force-sensitive") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). This is also not supported by the original specification as evidenced by at least the last paragraph of page 8 in which the sensor used is admitted to be a commercially available sensor formed by being "sandwiched between two layers of polyester films"; these polyester films are "covers" for the actual sensor. These types of sensors are usually inside a housing, or covers, etc., for the obvious purposes of protecting the delicate nature of the actual sensors.

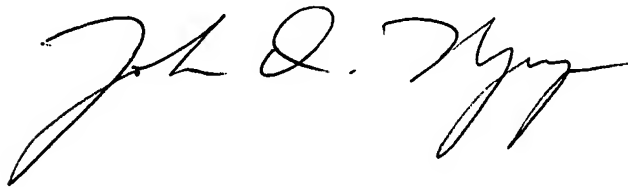
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Q. Nguyen whose telephone number is (571) 272-6952. The examiner can normally be reached on Monday, Tuesday, Thursday, and

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Friday, from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Matecki, can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "John Q. Nguyen". The signature is fluid and cursive, with the first letters of each word being capitalized and prominent.

John Q. Nguyen
Primary Examiner
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